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Sequence Listing was accepted.

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Reviewer: Durreshwar Anjum

Timestamp: [year=2008; month=11; day=12; hr=14; min=10; sec=53; ms=629;
]

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Application No: 10589381

Version No: 2.0

Input Set:**Output Set:****Started:** 2008-10-20 12:44:09.709**Finished:** 2008-10-20 12:44:11.266**Elapsed:** 0 hr(s) 0 min(s) 1 sec(s) 557 ms**Total Warnings:** 20**Total Errors:** 0**No. of SeqIDs Defined:** 20**Actual SeqID Count:** 20

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W 402	Undefined organism found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
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SEQUENCE LISTING

<110> Anderson, Annaliesa S.
Montgomery, Donna L.

<120> POLYPEPTIDES FOR INDUCING A PROTECTIVE
IMMUNE RESPONSE AGAINST STAPHYLOCOCCUS AUREUS

<130> 21490YP

<140> 10589381

<141> 2006-08-15

<150> PCT/US2005/004431

<151> 2005-02-14

<150> 60/545,447

<151> 2004-02-18

<160> 20

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 260

<212> PRT

<213> Artificial Sequence

<220>

<223> truncated derivative of sai-1

<400> 1

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			20					25					30		
Gln	His	Pro	Gly	Lys	Val	Ile	Lys	Gln	Asn	Asn	Lys	Tyr	Tyr	Phe	Gln
		35					40					45			
Thr	Val	Leu	Asn	Asn	Ala	Ser	Phe	Trp	Lys	Glu	Tyr	Lys	Phe	Tyr	Asn
		50				55					60				
Ala	Asn	Asn	Gln	Glu	Leu	Ala	Thr	Thr	Val	Val	Asn	Asp	Asn	Lys	Lys
65					70					75				80	
Ala	Asp	Thr	Arg	Thr	Ile	Asn	Val	Ala	Val	Glu	Pro	Gly	Tyr	Lys	Ser
			85						90				95		
Leu	Thr	Thr	Lys	Val	His	Ile	Val	Val	Pro	Gln	Ile	Asn	Tyr	Asn	His
			100					105					110		
Arg	Tyr	Thr	Thr	His	Leu	Glu	Phe	Glu	Lys	Ala	Ile	Pro	Thr	Leu	Ala
		115					120					125			
Asp	Ala	Ala	Lys	Pro	Asn	Asn	Val	Lys	Pro	Val	Gln	Pro	Lys	Pro	Ala
		130				135					140				
Gln	Pro	Lys	Thr	Pro	Thr	Glu	Gln	Thr	Lys	Pro	Val	Gln	Pro	Lys	Val
145					150					155				160	
Glu	Lys	Val	Lys	Pro	Thr	Val	Thr	Thr	Thr	Ser	Lys	Val	Glu	Asp	Asn
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<220>
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Arg Gly Ser His Met Gly Thr Gln Val Ser Gln Ala Thr Ser Gln Pro
20 25 30
Ile Asn Phe Gln Val Gln Lys Asp Gly Ser Ser Glu Lys Ser His Met
35 40 45
Asp Asp Tyr Met Gln His Pro Gly Lys Val Ile Lys Gln Asn Asn Lys
50 55 60
Tyr Tyr Phe Gln Thr Val Leu Asn Asn Ala Ser Phe Trp Lys Glu Tyr
65 70 75 80
Lys Phe Tyr Asn Ala Asn Asn Gln Glu Leu Ala Thr Thr Val Val Asn
85 90 95
Asp Asn Lys Lys Ala Asp Thr Arg Thr Ile Asn Val Ala Val Glu Pro
100 105 110
Gly Tyr Lys Ser Leu Thr Thr Lys Val His Ile Val Val Pro Gln Ile
115 120 125
Asn Tyr Asn His Arg Tyr Thr Thr His Leu Glu Phe Glu Lys Ala Ile
130 135 140
Pro Thr Leu Ala Asp Ala Ala Lys Pro Asn Asn Val Lys Pro Val Gln
145 150 155 160
Pro Lys Pro Ala Gln Pro Lys Thr Pro Thr Glu Gln Thr Lys Pro Val
165 170 175
Gln Pro Lys Val Glu Lys Val Lys Pro Thr Val Thr Thr Thr Ser Lys
180 185 190
Val Glu Asp Asn His Ser Thr Lys Val Val Ser Thr Asp Thr Thr Lys
195 200 205
Asp Gln Thr Lys Thr Gln Thr Ala His Thr Val Lys Thr Ala Gln Thr
210 215 220
Ala Gln Glu Gln Asn Lys Val Gln Thr Pro Val Lys Asp Val Ala Thr
225 230 235 240
Ala Lys Ser Glu Ser Asn Asn Gln Ala Val Ser Asp Asn Lys Ser Gln
245 250 255
Gln Thr Asn Lys Val Thr Lys His Asn Glu Thr Pro Lys Gln Ala Ser
260 265 270
Lys Ala Lys Glu Leu Pro Lys Thr
275 280

<210> 4
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          20          25          30
Ile Asn Phe Gln Val Gln Lys Asp Gly Ser Ser Glu Lys Ser His Met
          35          40          45
Asp Asp Tyr Met Gln His Pro Gly Lys Val Ile Lys Gln Asn Asn Lys
          50          55          60
Tyr Tyr Phe Gln Ala Val Leu Asn Asn Ala Ser Phe Trp Lys Glu Tyr
          65          70          75          80
Lys Phe Tyr Asn Ala Asn Asn Gln Glu Leu Ala Thr Thr Val Val Asn
          85          90          95
Asp Asp Lys Lys Ala Asp Thr Arg Thr Ile Asn Val Ala Val Glu Pro
          100          105          110
Gly Tyr Lys Ser Leu Thr Thr Lys Val His Ile Val Val Pro Gln Ile
          115          120          125
Asn Tyr Asn His Arg Tyr Thr Thr His Leu Glu Phe Glu Lys Ala Ile
          130          135          140
Pro Thr Leu Ala Asp Ala Ala Lys Pro Asn Asn Val Lys Pro Val Gln
          145          150          155          160
Pro Lys Pro Ala Gln Pro Lys Thr Pro Thr Glu Gln Thr Lys Pro Val
          165          170          175
Gln Pro Lys Val Glu Lys Val Lys Pro Ala Val Thr Ala Pro Ser Lys
          180          185          190
Asn Glu Asn Arg Gln Thr Thr Lys Val Val Ser Ser Glu Ala Thr Lys
          195          200          205
Asp Gln Ser Gln Thr Gln Ser Ala Arg Thr Val Lys Thr Thr Gln Thr
          210          215          220
Ala Gln Asp Gln Asn Lys Val Gln Thr Pro Val Lys Asp Val Ala Thr
          225          230          235          240
Ala Lys Ser Glu Ser Asn Asn Gln Ala Val Ser Asp Asn Lys Ser Gln
          245          250          255
Gln Thr Asn Lys Val Thr Lys Gln Asn Glu Val His Lys Gln Gly Pro
          260          265          270
Ser Lys Asp Ser Lys Ala Lys Glu Leu Pro Lys Thr
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<210> 5

<211> 268

<212> PRT

<213> Artificial Sequence

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<223> carboxyl His-tagged construct of SEQ ID NO: 1

<400> 5

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          20          25          30
Gln His Pro Gly Lys Val Ile Lys Gln Asn Asn Lys Tyr Tyr Phe Gln
          35          40          45
Thr Val Leu Asn Asn Ala Ser Phe Trp Lys Glu Tyr Lys Phe Tyr Asn
          50          55          60
Ala Asn Asn Gln Glu Leu Ala Thr Thr Val Val Asn Asp Asn Lys Lys
          65          70          75          80

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Ala	Asp	Thr	Arg	Thr	Ile	Asn	Val	Ala	Val	Glu	Pro	Gly	Tyr	Lys	Ser		
				85					90					95			
Leu	Thr	Thr	Lys	Val	His	Ile	Val	Val	Pro	Gln	Ile	Asn	Tyr	Asn	His		
			100					105					110				
Arg	Tyr	Thr	Thr	His	Leu	Glu	Phe	Glu	Lys	Ala	Ile	Pro	Thr	Leu	Ala		
		115				120						125					
Asp	Ala	Ala	Lys	Pro	Asn	Asn	Val	Lys	Pro	Val	Gln	Pro	Lys	Pro	Ala		
	130				135					140							
Gln	Pro	Lys	Thr	Pro	Thr	Glu	Gln	Thr	Lys	Pro	Val	Gln	Pro	Lys	Val		
145					150				155					160			
Glu	Lys	Val	Lys	Pro	Thr	Val	Thr	Thr	Thr	Ser	Lys	Val	Glu	Asp	Asn		
			165					170					175				
His	Ser	Thr	Lys	Val	Val	Ser	Thr	Asp	Thr	Thr	Lys	Asp	Gln	Thr	Lys		
		180						185					190				
Thr	Gln	Thr	Ala	His	Thr	Val	Lys	Thr	Ala	Gln	Thr	Ala	Gln	Glu	Gln		
	195					200				205							
Asn	Lys	Val	Gln	Thr	Pro	Val	Lys	Asp	Val	Ala	Thr	Ala	Lys	Ser	Glu		
	210				215				220								
Ser	Asn	Asn	Gln	Ala	Val	Ser	Asp	Asn	Lys	Ser	Gln	Gln	Thr	Asn	Lys		
225				230					235					240			
Val	Thr	Lys	His	Asn	Glu	Thr	Pro	Lys	Gln	Ala	Ser	Lys	Ala	Lys	Glu		
			245						250					255			
Leu	Pro	Lys	Thr	Leu	Glu	His	His	His	His	His	His						
		260						265									

<210> 6

<211> 395

<212> PRT

<213> Artificial Sequence

<220>

<223> amino His-tagged construct of SEQ ID NO: 7

<400> 6

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		20						25					30				
Ser	Pro	Asp	Leu	Gly	Thr	Asp	Asp	Asp	Asp	Lys	Ala	Met	Gly	Thr	Lys		
	35					40						45					
His	Tyr	Leu	Asn	Ser	Lys	Tyr	Gln	Ser	Glu	Gln	Arg	Ser	Ser	Ala	Met		
	50				55						60						
Lys	Lys	Ile	Thr	Met	Gly	Thr	Ala	Ser	Ile	Ile	Leu	Gly	Ser	Leu	Val		
65				70					75					80			
Tyr	Ile	Gly	Ala	Asp	Ser	Gln	Gln	Val	Asn	Ala	Ala	Thr	Glu	Ala	Thr		
			85					90					95				
Asn	Ala	Thr	Asn	Asn	Gln	Ser	Thr	Gln	Val	Ser	Gln	Ala	Thr	Ser	Gln		
	100							105					110				
Pro	Ile	Asn	Phe	Gln	Val	Gln	Lys	Asp	Gly	Ser	Ser	Glu	Lys	Ser	His		
	115						120					125					
Met	Asp	Asp	Tyr	Met	Gln	His	Pro	Gly	Lys	Val	Ile	Lys	Gln	Asn	Asn		
	130				135					140							
Lys	Tyr	Tyr	Phe	Gln	Thr	Val	Leu	Asn	Asn	Ala	Ser	Phe	Trp	Lys	Glu		
145				150					155					160			
Tyr	Lys	Phe	Tyr	Asn	Ala	Asn	Asn	Gln	Glu	Leu	Ala	Thr	Thr	Val	Val		
			165					170						175			

Asn	Asp	Asn	Lys	Lys	Ala	Asp	Thr	Arg	Thr	Ile	Asn	Val	Ala	Val	Glu
			180					185					190		
Pro	Gly	Tyr	Lys	Ser	Leu	Thr	Thr	Lys	Val	His	Ile	Val	Val	Pro	Gln
		195					200					205			
Ile	Asn	Tyr	Asn	His	Arg	Tyr	Thr	Thr	His	Leu	Glu	Phe	Glu	Lys	Ala
	210				215					220					
Ile	Pro	Thr	Leu	Ala	Asp	Ala	Ala	Lys	Pro	Asn	Asn	Val	Lys	Pro	Val
225					230					235					240
Gln	Pro	Lys	Pro	Ala	Gln	Pro	Lys	Thr	Pro	Thr	Glu	Gln	Thr	Lys	Pro
				245					250					255	
Val	Gln	Pro	Lys	Val	Glu	Lys	Val	Lys	Pro	Thr	Val	Thr	Thr	Thr	Ser
			260					265					270		
Lys	Val	Glu	Asp	Asn	His	Ser	Thr	Lys	Val	Val	Ser	Thr	Asp	Thr	Thr
		275					280					285			
Lys	Asp	Gln	Thr	Lys	Thr	Gln	Thr	Ala	His	Thr	Val	Lys	Thr	Ala	Gln
	290					295					300				
Thr	Ala	Gln	Glu	Gln	Asn	Lys	Val	Gln	Thr	Pro	Val	Lys	Asp	Val	Ala
305					310					315					320
Thr	Ala	Lys	Ser	Glu	Ser	Asn	Asn	Gln	Ala	Val	Ser	Asp	Asn	Lys	Ser
				325					330					335	
Gln	Gln	Thr	Asn	Lys	Val	Thr	Lys	His	Asn	Glu	Thr	Pro	Lys	Gln	Ala
			340					345					350		
Ser	Lys	Ala	Lys	Glu	Leu	Pro	Lys	Thr	Gly	Leu	Thr	Ser	Val	Asp	Asn
	355						360					365			
Phe	Ile	Ser	Thr	Val	Ala	Phe	Ala	Thr	Leu	Ala	Leu	Leu	Gly	Ser	Leu
	370					375					380				
Ser	Leu	Leu	Leu	Phe	Lys	Arg	Lys	Glu	Ser	Lys					
385					390					395					

<210> 7

<211> 350

<212> PRT

<213> S. aureus

<400> 7

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		20					25					30			
Ser	Leu	Val	Tyr	Ile	Gly	Ala	Asp	Ser	Gln	Gln	Val	Asn	Ala	Ala	Thr
	35					40					45				
Glu	Ala	Thr	Asn	Ala	Thr	Asn	Asn	Gln	Ser	Thr	Gln	Val	Ser	Gln	Ala
	50					55					60				
Thr	Ser	Gln	Pro	Ile	Asn	Phe	Gln	Val	Gln	Lys	Asp	Gly	Ser	Ser	Glu
65					70					75					80
Lys	Ser	His	Met	Asp	Asp	Tyr	Met	Gln	His	Pro	Gly	Lys	Val	Ile	Lys
			85						90					95	
Gln	Asn	Asn	Lys	Tyr	Tyr	Phe	Gln	Thr	Val	Leu	Asn	Asn	Ala	Ser	Phe
		100						105					110		
Trp	Lys	Glu	Tyr	Lys	Phe	Tyr	Asn	Ala	Asn	Asn	Gln	Glu	Leu	Ala	Thr
		115					120					125			
Thr	Val	Val	Asn	Asp	Asn	Lys	Lys	Ala	Asp	Thr	Arg	Thr	Ile	Asn	Val
	130					135					140				
Ala	Val	Glu	Pro	Gly	Tyr	Lys	Ser	Leu	Thr	Thr	Lys	Val	His	Ile	Val
145					150					155					160
Val	Pro	Gln	Ile	Asn	Tyr	Asn	His	Arg	Tyr	Thr	Thr	His	Leu	Glu	Phe

				165				170				175			
Glu	Lys	Ala	Ile	Pro	Thr	Leu	Ala	Asp	Ala	Ala	Lys	Pro	Asn	Asn	Val
				180				185				190			
Lys	Pro	Val	Gln	Pro	Lys	Pro	Ala	Gln	Pro	Lys	Thr	Pro	Thr	Glu	Gln
				195				200				205			
Thr	Lys	Pro	Val	Gln	Pro	Lys	Val	Glu	Lys	Val	Lys	Pro	Thr	Val	Thr
				210				215				220			
Thr	Thr	Ser	Lys	Val	Glu	Asp	Asn	His	Ser	Thr	Lys	Val	Val	Ser	Thr
225				230				235				240			
Asp	Thr	Thr	Lys	Asp	Gln	Thr	Lys	Thr	Gln	Thr	Ala	His	Thr	Val	Lys
				245				250				255			
Thr	Ala	Gln	Thr	Ala	Gln	Glu	Gln	Asn	Lys	Val	Gln	Thr	Pro	Val	Lys
				260				265				270			
Asp	Val	Ala	Thr	Ala	Lys	Ser	Glu	Ser	Asn	Asn	Gln	Al			